

Listing of Claims/Amendments to the Claims:

The listing of claims that follows will replace all prior versions in the application.

1. (Currently Amended) A method for ~~detection of a~~detecting failure of an air consumer circuit in a compressed air system ~~for vehicles~~, comprising the steps of ~~wherein measuring the actual value of a variable of state (pressure, air flow rate, air mass, energy)~~ in ~~the a~~ compressed air consumer circuits, ~~is continuously measured and is evaluated in an electronic control unit, characterized by the following steps:~~

—— ~~comparison of~~comparing the values of the at least one of said variable of state and/or ~~of the a~~ negative gradients of ~~the said~~ variable of state of the compressed air consumer circuits ~~with~~against a respective threshold value, and

—— ~~shutoff of the compressed air consumer circuit in question when the values of the~~ at least one of said variable of state and/or ~~of the~~ said negative gradient of ~~the said~~ variable of state satisfies a preselected circuit-failure criterion, shutting off said compressed air consumer circuit.

2. (Currently Amended) A ~~The~~ method according to claim 1, ~~characterized in that the~~ wherein said preselected circuit-failure criterion is satisfied when the values and/or gradients of at least one of said the variable of state and said negative gradient of said variable of state ~~are~~ is below ~~the said~~ respective threshold value for a time at least one of equal to or longer and greater than the a time t_{dyn} ~~of~~ at least one of a dynamic change of ~~the said~~ variable of state ~~or of~~ and a dynamic collapse of ~~the said~~ variable of state ($t \geq t_{dyn}$).

3. (Currently Amended) A ~~The~~ method according to claim 1 ~~or 2~~, ~~characterized in that~~ wherein the said threshold value ~~or for the said~~ variable of state corresponds to

the a value of the said variable of state to be adjusted in the respective said compressed air consumer circuit.

4. (Currently Amended) A ~~device~~detection system for ~~detection of~~
~~adetecting~~ failure of a compressed air consumer circuit within a compressed air system, ~~which is~~
~~provided with~~ including a compressed air supply part ~~provided with~~having a compressor, and a
consumer part ~~with~~having a plurality of compressed air consumer circuits, ~~which are supplied~~
~~with compressed air via~~ and electrically actuatable valves for supplying compressed air to said
compressed air consumer circuits, ~~wherein the pressure in the compressed air consumer circuits~~
~~is monitored by the~~ detection system comprising sensors for monitoring pressure in said
compressed air consumer circuits, ~~whose electrical signals are evaluated by an electronic control~~
~~unit for evaluating electrical signals from said sensors that controls the~~ and for controlling said
electrically actuatable valves, ~~characterized in that the~~said electrically actuatable valves (16, 18,
20, 22) ~~of the~~associated with said compressed air consumer circuits (26, 28, 30, 32, 34, 36)
~~are being open, and in that, for detection of the failure of a compressed air consumer circuit,~~
~~the~~said control unit (84) ~~compares being adapted to compare determined values of at least one of~~
a variable of state in individual ones of said compressed air consumer circuits (pressure, air flow
rate, air mass, energy) ~~and/or a negative gradients of a~~said variable of state ~~with~~against a
respective threshold value ~~and identifies a~~ to identify failed ones of said compressed air consumer
circuits as a defective or failed circuit, and it switches the valve to switch ones of said electrically
actuated valves associated with ~~this compressed air consumer~~said failed ones of said compressed
air consumer circuits to a blocked/closed state in order to shut off thesaid failed ones of said
compressed air consumer circuits ~~in question if the~~ when at least one of said variable of

~~state~~pressure values and/or negative ~~pressure~~gradients thereof satisfy a preselected circuit-failure criterion.

5. (Currently Amended) ~~A device~~The system according to claim 4, ~~characterized in that~~wherein the~~said~~preselected circuit-failure criterion is satisfied when ~~the values and/or gradients of the monitored~~at least one of said variable of state and said negative gradient ~~are~~is below ~~the~~said respective threshold value for a time t ~~at least one of equal to or longer and greater than the~~a time t_{dyn} of at least one of a dynamic change of ~~the~~said variable of state ~~or of~~and a dynamic collapse of ~~the~~said variable of state ($t \geq t_{dyn}$).

6. (Currently Amended) ~~A device~~The system according to claim 4, ~~characterized in that~~wherein the~~said~~threshold value ~~for said~~the variable of state corresponds to ~~the~~a value of ~~the~~said variable of state to be adjusted in ~~the~~the ~~respective~~said failed ones of said compressed air consumer circuits.

7. (Currently Amended) ~~A device~~The system according to claim 4, ~~characterized in that~~wherein the~~said~~electrically actuatable valves are solenoid valves.

8. (New) The method according to claim 1, wherein said variable of state is at least one of pressure, air flow rate, air mass and energy of said compressed air consumer circuit.

9. (New) The system according to claim 4, wherein said variable of state is at least one of pressure, air flow rate, air mass and energy of said compressed air consumer circuits.